

WHAT IS CLAIMED IS:

1. A printed wiring board printhead for forming an image on electric paper comprising
a glass substrate having a first planar surface and a second planar surface, said first
5 planar surface and said second planar surface being substantially parallel, said glass
substrate having an edge between said first planar surface and said second planar surface;
a plurality of conductive traces formed on said first planar surface of said glass
substrate;
a plurality of conductive bonding pads formed on said first planar surface of said
10 glass substrate;
a plurality of electrodes formed on said first planar surface of said glass substrate
and partially on said edge of said glass substrate, said plurality of conductive traces
connecting said a plurality of conductive bonding pads to said plurality of electrodes, said
plurality of electrodes being substantially parallel and equally spaced apart; and
15 driving means connected to said plurality of conductive bonding pads to send an
electrical signal to each of said plurality of electrodes, said electrical signal generating an
electric field between said electrode and said electric paper for controlling the
corresponding individual pixel of said electric paper to form said image.

20 2. The printed wiring board printhead for forming an image on electric paper of claim 1
wherein said electric paper comprises a retaining medium with a plurality of rotatable
elements, said rotatable elements having at least two different colored sides and an
electrical anisotropy, each of said plurality of electrodes having a corresponding rotatable
element such that said electric field between said electrode and said electric paper causes
25 said corresponding rotatable element to rotate to display one of said at least two different
colored sides.

3. The printed wiring board printhead for forming an image on electric paper of claim 1
wherein said driving means is an integrated chip bonded to said plurality of conductive
30 bonding pads.

4. The printed wiring board printhead for forming an image on electric paper of claim 1
wherein said plurality of electrodes comprises said plurality of conductive traces formed
on said first planar surface of said glass substrate, said plurality of conductive traces being
formed of a first metal, and a plurality of electrode layers formed on said first planar
5 surface of said glass substrate over said plurality of conductive traces and partially on said
edge of said glass substrate, said plurality of electrode layers being formed of a second
metal.

5. The printed wiring board printhead for forming an image on electric paper of claim 4
10 wherein said first metal of said plurality of conductive traces is copper.

6. The printed wiring board printhead for forming an image on electric paper of claim 5
wherein said second metal of said plurality of electrode layers is rhodium/platinum.

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7. The printed wiring board printhead for forming an image on electric paper of claim 5
wherein said second metal of said plurality of electrode layers is rhodium/platinum.

20 8. The printed wiring board printhead for forming an image on electric paper of claim 1
further comprising an isolation resistor formed on each of said plurality of conductive
traces.

9. The printed wiring board printhead for forming an image on electric paper of claim 1
25 further comprising a mount attached to said second planar surface of said glass substrate.